

Comprehensive Plan Provides for Ecosystem Restoration and Supports a Sustainable South Florida

The benefits of getting the water right are enormous. The entire south Florida ecosystem, including the Everglades, will become healthy, with many of its natural characteristics restored. Urban and agricultural water users will also benefit from enhanced water supplies. Flood protection, so important to hurricane-prone south Florida, will be maintained and, in some cases, improved.

Economic benefits from the implementation of the Comprehensive Plan are wide-ranging and are linked with the availability of clean, abundant water in the ecosystem. Not only is water the key to ecosystem restoration, it is necessary for a sustainable agricultural and urban environment. It is important for recreation, tourism, and navigation. It plays a significant and obvious role in commercial and recreational fishing.

The Comprehensive Plan will provide for ecosystem restoration. First and foremost, the goal of the Comprehensive Plan is to restore, protect, and preserve a natural treasure – the south Florida ecosystem. The focus of the Plan has been to restore the defining ecological features of the original Everglades and other parts of south Florida. In response to this substantial improvement, the characteristic animals will show dramatic and positive responses. The numbers of animals — crayfish, minnows, sunfish, frogs, alligators, herons, ibis, and otters — at virtually all levels in aquatic food chains will markedly increase. Equally important, the distribution of plants and animals will return to more natural patterns as more pre-drainage water flows are restored.

The Plan will support the return of the large nesting “rookeries” of wading birds to Everglades National Park and the recovery of several endangered species to more certain and optimistic futures. Wading birds, such as herons, egrets, ibis and storks, are symbolic of the overall health of the Everglades. As recently as the 1950s and 1960s, large “super

Implementation of the Comprehensive Plan will....

- ❖ Improve the health of over 2.4 million acres of the south Florida ecosystem, including Everglades National Park;
- ❖ Improve the health of Lake Okeechobee;
- ❖ Virtually eliminate damaging fresh water releases to the estuaries;
- ❖ Improve water deliveries to Florida and Biscayne bays;
- ❖ Improve water quality; and
- ❖ Enhance water supply and maintain flood protection.

colonies” of nesting waders remained in the Park. Today there no such super colonies. Wading birds, perhaps more than any other animal, “assess” the quality of the entire basin of south Florida wetlands before making “decisions” about where and when, or even whether, to nest. The recovery of the super colonies will be a sure sign that the entire ecosystem has made substantial progress. Of the endangered species, the wood stork, snail kite, Cape Sable seaside sparrow, and American crocodile, among others, will benefit and increase. We are confident that implementation of the Comprehensive Plan will once again allow us to witness what is now only a fading memory of the former abundance of wildlife in the Everglades.

Lake Okeechobee will once again become a healthy lake. Both the shallow and open water areas within the lake, essential to its commercial and recreational fishery and other aquatic species, will be greatly enhanced by the improved water levels as a result of the Comprehensive Plan. This will mean more abundant

and healthier fish populations. Water quality in the lake will also be improved significantly by reducing the pollutant loading of water flowing into the lake. Lake Okeechobee provides huge regional benefits to wildlife, including waterfowl, other birds, and mammals.

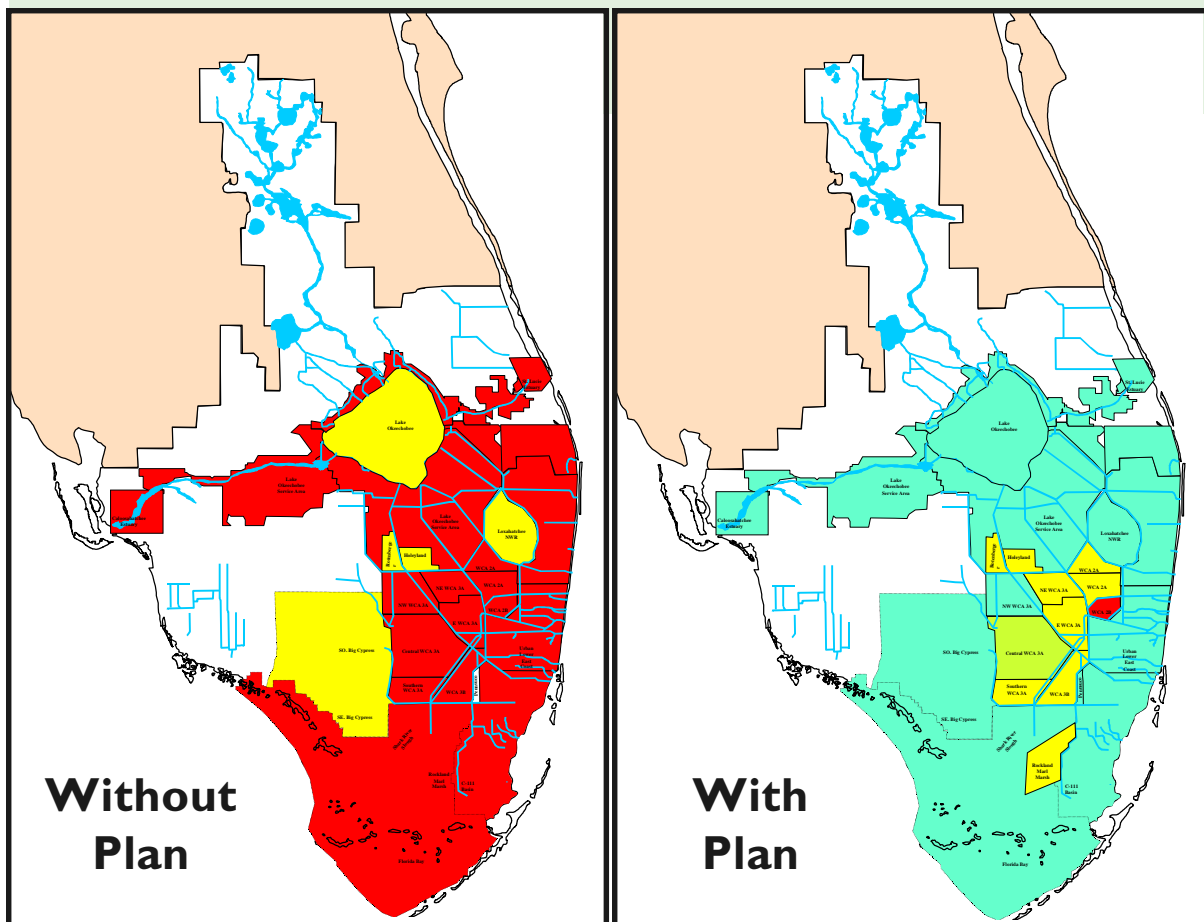
Major benefits will be provided to the Caloosahatchee and St. Lucie estuaries and Lake Worth Lagoon. The Comprehensive Plan eliminates almost all the damaging fresh water releases to the Caloosahatchee and most detrimental releases to the St. Lucie and makes substantial improvements to Lake Worth Lagoon. As a result, abundant favorable habitats will be provided for the many aquatic

species that depend on these areas for food, shelter, and breeding grounds, thereby enhancing the productivity and economic viability of estuarine fisheries.

The Plan will also improve fresh water deliveries to Florida and Biscayne bays. Appropriate fresh water regimes will result in substantial improvements in aquatic and semi-aquatic habitats, including, mangroves, coastal marshes, seagrass beds and coral reefs. Interacting together to produce food, shelter, and breeding and nursery grounds, these coastal habitat areas will support more balanced, productive fish, shellfish, and wildlife communities.

Future Ecosystem Conditions

The scientists involved in the Restudy evaluated ecosystem conditions expected in the future. The results of their evaluation are shown on these maps. Green indicates areas where the Plan is likely to be successful. Yellow indicates areas where meeting the targets is uncertain, or the Plan may be marginally successful. Red indicates areas where the targets are not met, and scientists believe that recovery is unlikely. Because of the flexibility inherent in the Plan and its implementation, the scientists also believe the red and yellow areas can be improved.



THE BENEFITS

Restoration of the ecosystem key to a long-term sustainable Florida economy.

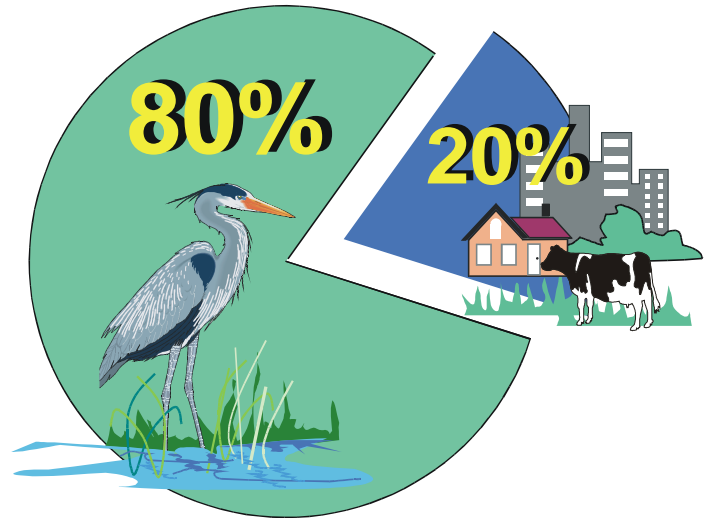
A healthy environment is an integral part of a healthy economy. Clean and abundant water is essential for a prosperous and productive national economy. Plant and animal diversity is important both from an intrinsic and economic standpoint. If we are to have strong and sustainable economic growth, we must invest in the health of our environment.

While we know that restoration and protection of the environment is a good investment in the future, quantifying the monetary benefits of ecosystem restoration is often difficult using traditional methods of analysis. However, investments in a healthy environment do have direct and indirect effects on the economy.

The economy of south Florida is based on services, agriculture, and tourism. The total economic output of the region exceeds \$200 billion annually. There is a strong linkage among the south Florida ecosystem, the economy and the quality of communities.

The Everglades support a significant amount of outdoor recreation. Over six million people spend approximately \$400 million a year visiting just the Everglades-related parks and preserves alone. Visitors to the area come to enjoy the beautiful and diverse plants and animals for which the area is known.

“New” Water Distribution



The Florida Keys are the number one destination for scuba divers in the world. More than four million people visit the Florida Keys and Florida Bay every year primarily to engage in water related activities, including fishing, diving, boating and watching wildlife. Ecological improvements will lead to more and better recreational opportunities throughout south Florida. Visitors to Lake Okeechobee, Everglades National Park, and the Florida Keys come to these areas not only for their beauty but for the recreational opportunities that they provide. Lake Okeechobee supports a diverse community of wading birds, migratory waterfowl, and other wildlife, including the endangered snail kite. These animals are important



to the regional economy, which is dependent on use of the lake for eco-tourism and recreation. Activities include bird and wildlife observation, hiking, camping, hunting, and recreational boating.

South Florida's commercial fisheries generate revenues of about \$18 million annually. Improved aquatic conditions in Lake Okeechobee, Florida Bay, and estuaries will result in increased fishing opportunities in these areas that are some of the most valuable commercial marine fisheries in the nation. South Florida's recreational fishing industry has estimated revenues of over \$600 million annually.

The Plan increases the availability of water for everyone. The Comprehensive Plan will increase the amount of fresh water available not just for the natural system, but for all water users. Florida is the second ranking state in the production of fresh vegetables, the national leader in citrus fruit production, and the world leader in the production of grapefruit. Agriculture in south Florida generates \$3.8 billion per year in economic activity. An adequate supply of water is key to maintaining healthy agriculture in south Florida. Residents and visitors can also expect fewer water restrictions. Without the Plan, water restrictions could be expected every year in some areas, but the Plan will reduce that to as little

as once in every ten years. Overall, the Plan will provide an expanded fresh water source to meet south Florida's population needs, which will eliminate the current competition for water with the natural system.

The level of flood protection will be maintained or improved. Florida is a low-lying, flat, wet state, and almost all of south Florida is prone to flooding. Today, the Central and Southern Florida Project, supported by many locally operated canal networks, provides flood protection on a regional basis for south Florida. The Project has prevented costly flood damage throughout the region. The Comprehensive Plan will maintain, and in some situations improve, this important protection from flooding.

Multiple benefits will make south Florida sustainable. With no change, the region will soon experience more frequent water shortages, flooding, and continued degradation of the Everglades, coastal estuaries, and other natural resources. In turn, this will have an adverse effect on the economy of south Florida, which is so important to the nation. Implementation of the Plan will result in the recovery of a healthy, sustainable ecosystem in south Florida for the people and wildlife that depend on this natural system for their survival and well being.

(For more information, please refer to the Summary in the final report.)

Indicators of a Restored Ecosystem

- Wetland functions that mimic pre-drainage conditions
- Significant increases in animal populations at all levels in the aquatic food chain
- Return of large nesting "rookeries" of wading birds to Everglades National Park
- Recovery of a number of endangered species
- Quality of water discharged to natural areas meets non-degradation standards
- Improved health of Lake Okeechobee fishery
- Increased freshwater flows to bays and estuaries
- Improved health of seagrasses and other submerged aquatic vegetation
- Greatly reduced frequency of water restrictions